

CLAIMS

What Is Claimed Is:

1 Claim 1. A sensor position adjusting device, comprising:
2 a rotatable coin selecting disc member for selectively dispensing coins from an
3 attached coin bowl comprising a coin dispenser;
4 a driven member which is moved by the dispensed coins from the rotatable
5 coin selecting disc member;
6 a sensor unit for detecting the movement of the driven member, the sensor unit
7 being positioned adjacent to the driven member; and
8 a screw unit for adjusting the position of the sensor unit adjacent to the driven
9 member.

1 Claim 2. The sensor position adjusting device of Claim 1,
2 wherein the screw unit comprises:
3 a fixed base plate attached to the coin dispenser;
4 a movable base plate adjacent to the fixed base plate, the movable base plate
5 being capable of movement relative to the fixed base plate, the sensor unit being mounted in
6 a fixed position on the movable base plate; and
7 a screw for adjusting the relative position of the movable base plate relative to
8 the fixed base plate, the screw being operatively connected to both the fixed base plate and
9 the moveable base plate.

1 Claim 3. The sensor position adjusting device of Claim 2,
2 wherein rotation of the screw does not cause axial movement between the
3 screw and the fixed base plate, while rotation of the screw causes movement between the
4 screw and the movable base plate in a direction along the axis of the screw.

1 Claim 4. The sensor position adjusting device of Claim 2, further comprising:
2 a guiding unit for enabling relative movement of the movable base plate and
3 the fixed base plate only in the direction along the axis of the screw.

1 Claim 5. The sensor position adjusting device of Claim 2,
2 wherein the movable base plate includes an attaching bracket for attaching the
3 sensor unit to the movable base plate, the sensor unit being mounted on the attaching bracket
4 so that the attaching bracket is disposed between the sensor unit and the driven member.

1 Claim 6. The sensor position adjusting device of Claim 4, further comprising:
2 a fixing unit for preserving the relative position of the movable base plate and
3 the fixed base plate, the fixing unit including a pair of screws and a retainer member,
4 wherein the screws can push the retainer member against the movable base
5 plate to secure against movement of the movable plate relative to the fixed base plate.

1 Claim 7. A sensor position adjusting device, comprising:
2 a driving member for being driven by a coin dispensed by a coin dispenser;
3 a sensor unit for detecting movement of the driving member to detect a coin
4 dispensed by a coin dispenser; and
5 a screw unit for adjusting the relative position of the sensor unit and the
6 driving member.

1 Claim 8. The sensor position adjusting device of Claim 7,
2 wherein the screw unit further comprises:
3 a fixed base plate attached to the coin dispenser, the fixed base plate having a
4 first bracket extending perpendicular to the fixed base plate;

5 a movable base plate releasably attached to the fixed base plate, the movable
6 base plate having a second bracket extending perpendicular to the movable base plate, the
7 sensor unit being mounted on the movable base plate; and

8 a screw positioned to operatively connect a portion of the first bracket and the
9 second bracket so that turning the screw causes the first bracket and the second bracket to
10 move relative to each other,

11 wherein turning the screw adjusts the position of the sensor unit.

1 Claim 9. The sensor position adjusting device of Claim 8, further comprising:

2 a fixing unit for preserving the relative position of the movable base plate to
3 the fixed base plate.

1 Claim 10. The sensor position adjusting device of Claim 9,

2 wherein the fixing unit includes a screw threaded from the movable bracket to
3 the fixed bracket such that tightening the screw does not change the position of the movable
4 bracket to the fixed bracket.

1 Claim 11. The sensor position adjusting device of Claim 8,

2 wherein the first bracket has a through hole and the second bracket has a
3 threaded hole, the screw being positioned to pass through the through hole and being
4 threadedly engaged in the threaded hole, the through hole having a diameter that is larger
5 than the diameter of the screw so that the screw is retained in the through hole in a non-
6 threaded manner.

1 Claim 12. The sensor position adjusting device of Claim 9, further comprising:

2 a spring mounted over the axis of the screw and between the first bracket and
3 the second bracket, the spring providing an opposing force between the first bracket and the
4 second bracket along the axis of the screw.

1 Claim 13. The sensor position adjusting device of Claim 8,
2 wherein the movable base plate includes elongated holes along the axis of the
3 screw, the elongated holes allowing movement of the movable base plate relative to the fixed
4 base plate only in the direction of the elongated holes.

1 Claim 14. The sensor position adjusting device of Claim 7,
2 wherein the sensor unit includes an optical emitter and sensor pair.

1 Claim 15. The sensor position adjusting device of Claim 7,
2 wherein the sensor unit includes a proximity sensor.

1 Claim 16. The sensor position adjusting device of Claim 7,
2 wherein the sensor unit includes a switch.

1 Claim 17. The sensor position adjusting device of Claim 7,
2 wherein the sensor unit includes a coil.

1 Claim 18. The sensor position adjusting device of Claim 7,
2 wherein the sensor unit includes an electromagnetic sensor.

1 Claim 19. A coin dispensing device having a driving member that is moved by a
2 dispensed coin and a sensor unit for sensing some aspect of the position of the
3 driving member, the sensor unit being fastened to a wall member that is parallel to
4 the plane of motion defined by the movement of the driving member moved by the
5 dispensed coin, the improvement comprising:

6 a screw unit for adjusting the relative position of the sensor unit and the
7 driving member in a plane parallel to the plane of motion defined by the movement of the

- 8 driving member, wherein the sensor unit is fastened to wall member in a direction that is
- 9 perpendicular to the plane of motion defined by the movement of the driving member.